Jeffrey Powell

Serial No.: 10/624,361

**AMENDMENT** 

Page 2

- 1. (Canceled).
- 2. (Canceled).
- 3. (Canceled).
- 4. (Canceled).
- 5. (Canceled).
- 6. (Canceled).
- 7. (Canceled).
- 8. (Canceled).
- 9. (Canceled).
- 10. (Canceled).
- 11. (Canceled).
- 12. (Canceled).
- 13. (Canceled).
- 14. (Canceled).

Jeffrey Powell Serial No.: 10/624,361 AMENDMENT Page 3

- 15. (Canceled).
- 16. (Canceled).
- 17. (Canceled).
- 18. (Canceled).
- 19. (Canceled).
- 20. (Canceled).
- 21. (Canceled).
- 22. (Currently Amended) A method of tilling soil comprising:
- (a) pulling a seedbed preparation implement in a draft direction;
- (b) during the step (a), plowing the soil using a plurality of plow shanks mounted on a main frame of said seedbed preparation implement;
- (c) during the step (a), cutting and turning the soil using a plurality of rotating discs of a disc gang, said discs rotating about a common axis that extends at a gang angle relative to a perpendicular to said draft direction, and
- (d) adjusting said gang angle by moving said disc gang relative to said mainframe, the adjustment being infinite through a designated range of at least 3°;

wherein the adjusting step comprises pivoting one end portion of a main beam of said disc gang about a vertical axis while permitting a pin extending from another portion of said main beam to slide within an elongated slot on said mainframe.

Jeffrey Powell

Serial No.: 10/624,361

**AMENDMENT** 

Page 4

- 23. (Original) The method as recited in claim 22, wherein the disc gang angle is infinitely adjustable within at least a range extending from about 5° to about 10°.
  - 24. (Cancelled).
- 25. (Original) The method as recited in claim 22, wherein the adjusting step comprises actuating an actuator extending between said main beam and said mainframe.
- 26. (Currently Amended) The method as recited in claim 242, wherein said discs are mounted on a disc support beam that is connected to said main beam and that moves with said main beam during gang angle adjustment, and further comprising raising and lowering said disc support beam relative to said main beam to adjust a cutting depth of said discs.
  - 27. (Original) A method of tiling soil, comprising:
  - (a) pulling a seedbed preparation implement in a draft direction;
- (b) during the step (a), plowing the soil using a plurality of plow shanks mounted on a main frame of said seedbed preparation implement;
- (c) during the step (a), cutting and turning the soil using a plurality of rotating discs of a disc gang, said disc gang including a main beam that is coupled to a front portion of said mainframe, and a disc support beam that is located in front of said main beam, that is coupled to said main beam so as to move therewith, and that supports said discs so as to permit said discs to rotate about a common axis that extends at a gang angle relative to a perpendicular to said draft direction; and
- (d) adjusting said gang angle by actuating an actuator so as to pivot said main beam about a vertical axis and thereby to cause a pin coupled to said main beam to slide along an unsegmented guide in a plate attached to said frame.

Jeffrey Powell Serial No.: 10/624,361 AMENDMENT Page 5

28. (Original) The method as recited in claim 27, further comprising raising and lowering said disc support beam relative to said main beam to adjust a cutting depth of said discs.